Listing of Claims

1. (Currently Amended) A method of visualising an internal hollow organ of a subject based on a volumetric scan thereof, said method comprising the step of:

a) Reconstructing a number of three-dimensional images ~~(1)~~ of the internal surface of the hollow organ ~~(3)~~;

characterised in that for each image the method comprises the steps of:

b) Calculating an image ~~(I_i)~~ for the left eye from a first view point ~~(l_i)~~;

c) Calculating an image ~~(R_i)~~ for the right eye from a second view point ~~(r_i)~~ that differs from the first view point;

d) Combining the left eye image and the right eye image into a pair ~~(I_i,R_i)~~ to form a stereoscopic image; and

e) Showing the stereoscopic image using stereoscopic imager means.

2. (Currently Amended) Method according to claim 1, wherein step a) further comprises the steps of:

I. Defining a view path ~~(4)~~ through the hollow organ ~~(3)~~; and

II. Reconstructing the images as seen from view points lying on the view path, characterised in that, at least the first ~~(l_i)~~ or the second view point ~~(r_i)~~ lies on the view path.

3. (Currently Amended) Method according to claim 1, wherein step a) further comprises the steps of:

I. Defining a view path ~~(4)~~ through the hollow organ ~~(3)~~; and

II. Reconstructing the images as seen from view points lying on the view path, characterised in that, both the first ~~(l_i)~~ and second view point ~~(r_i)~~ lie on the view path.

4. (Currently Amended) Method according to claim 3, wherein view points on the view path ~~(4)~~ are alternately used as first ~~(l_i)~~ or second view point ~~(r_i)~~.

5. (Currently Amended) Method according to claim 1, wherein step a) further comprises the steps of:

I. Defining a view path ~~(4)~~ through the hollow organ ~~(3)~~, the method being

characterised in that, for each image the first view point ~~(l_i)~~ lies on a first line and the second view point ~~(r_i)~~ lies on a second line, which first and second lines extend essentially parallel to the view path at a certain mutual distance.

6. (Currently Amended) Method according to ~~one or more of the preceding claims~~claim 1, wherein the distance between the first ~~(l_i)~~ and the second viewpoint ~~(r_i)~~ is essentially one or more millimetres.

7. (Currently Amended) Method according to ~~one or more of the preceding claims~~claim 1, wherein the view direction in the first ~~(l_i)~~ and the second view point ~~(r_i)~~ is essentially parallel.

8. (Currently Amended) Method according to ~~one or more of the preceding claims~~claim 1, wherein step e) further comprises the steps of:

I. Showing the left ~~(L_i)~~ and right eye image ~~(R_i)~~ forming a stereoscopic image ~~(L_i, R_i)~~ with different modification; and

II. Arranging the stereoscopic imager means such that the left eye image is passed to the left eye and the right eye image is passed to the right eye.

9. (Currently Amended) Method according to claim 8, wherein step I comprises the step of:

Alternately showing the left ~~(L_i)~~ and right eye image ~~(R_i)~~ of a stereoscopic image ~~(L_i, R_i)~~ with different polarization; and wherein step II comprises the step of:

Providing the stereoscopic imager means with correspondingly differently polarized viewing means for respectively the left and right eye.

10. (Currently Amended) Method according to claim 8, wherein step I comprises the step of:

Showing the left ~~(L_i)~~ and right eye image ~~(R_i)~~ of a stereoscopic image ~~(L_i, R_i)~~ with different time-multiplexation, and wherein step II comprises the step of:

Providing the stereoscopic imager means with different viewing means for the left and right eye that are to be activated separately by a control unit based on corresponding time-multiplexation signals.

11. (Currently Amended) Method according to claim 9 ~~or 10~~, wherein the viewing means are incorporated in a head-mountable display.

12. (Currently Amended) Method according to ~~one or more of the preceding claims 1 through 8~~claim 1, wherein the stereoscopic imager means comprise a lenticular screen.

13. (Currently Amended) A system for visualising an internal hollow organ of a subject based on a volumetric scan thereof, which systems comprises: ~~means for carrying out the steps of the method according to one or more of the preceding claims.~~

a) means for reconstructing a number of three-dimensional images of the internal surface of the hollow organ;

characterised in that for each image the method comprises the steps of:

b) means for calculating an image for the left eye from a first view point;

c) means for calculating an image for the right eye from a second view point that differs from the first view point;

d) means for combining the left eye image and the right eye image into a pair to form a stereoscopic image; and

e) means for showing the stereoscopic image using stereoscopic imager means.

14. (Currently Amended) A computer readable media comprising a ~~Computer~~ program to carry out the method according ~~one or more of the preceding claims 1 through 12~~to claim 1.

15. (New) Method according to claim 10, wherein the viewing means are incorporated in a head-mountable display.